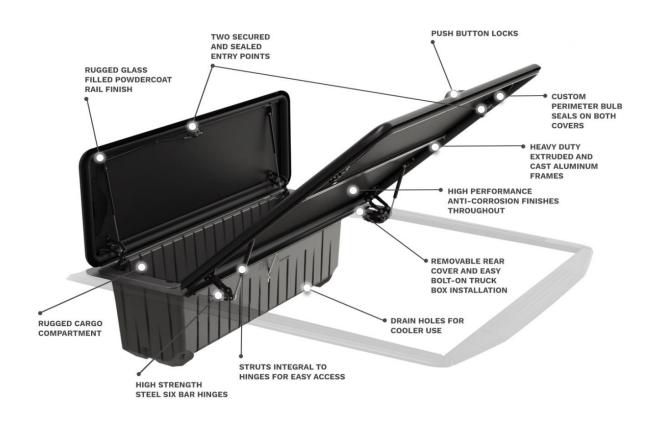


# Installation Guide Stowe Cargo 2-in-1 Tonneau Cover & Tool Box 2022 – 2024 Tundra (with Deck rail system)



## Any questions please contact us:

Email: customerservice@stowecargo.com

Phone: 248-795-2240



#### **Table of Contents**

- 1. Pre-Installation
  - a. Notes, Installation Kit contents & Tools needed
- 2. How to Install the 2-In-1 Tool Box & Tonneau Cover
- 3. Appendix
  - a. Replacing a strut
  - b. Removing the tonneau cover

#### **Installation Overview**

The sequence of installation involves seven steps

- 1) Truck box prep
- 2) Front attachment rails Front bedrails
- 3) Head board seal
- 4) Tool box cross member
- 5) Tool box & cover
- 6) Tonneau cover
- 7) Rear attachment rails Rear bedrails & striker



Open all boxes, inspect the contents, and confirm the contents against the parts list below.

# **Installation Kit Box Contents**

Contents of the Kit Box:

- 1) Front & Rear Bed Rails Driver (Front & Rear) & Passenger (Front & Rear)
- 2) Tonneau Struts (2) tool box struts are attached to the tool box cover
- 3) Parts kit bags 1-6

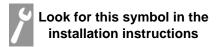
Tool Box Cross Member packaged separately

(Quantities shown in brackets)

BAG	Cell 1	Cell 2	Cell 3	
1	Head Board seals – Kit 1 Rib Fillers – Kits 2A & 2B	Bedrail mounting studs (6)	Mounting stud nuts (4)	
2	Front bedrail locating template	Bed rail seals		
3	Head Board seal (Taped to the floor of the toolbox)			
4	Cross member studs (2) & nuts (2)	Front hinge spacers (2) / spacer bolts (4)	Front cover mounting blocks (2)	
5	Front striker / spacer plate / nuts (2)	Tool box flange reinforcement screws (6)	Tool box rear flange brace / nut & screw	
6	Perimeter seal track extenders (2)	Rear hinge nuts (2) & bolts (2) Rear hinge stop screws (2)	Bedrail mounting stud nuts (2)	

**Important Note:** the Installation Kit and Cross Member are attached to the bottom of the toolbox carton

## **Tools Needed**



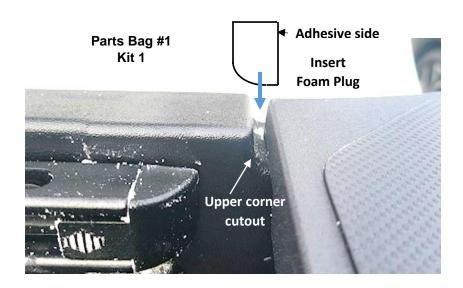
Wrenches – 10, 13, 15 mm 5/32" hex key wrench

Screw driver – Phillips Scissors Tape measure (in)



# **Truck Box Prep**

#### Sealing the head board upper corner cutouts



The truck bed itself can be a source of water leaks into the bed. These pathways don't necessarily represent a threat to your gear but can generate a noticeable deposit of water on the floor of the box.

The head board upper corner cutouts represent two such leakage points.

Insert the foam plugs as shown.



# **Truck Box Prep**





Clean the rib gaps with rubbing alcohol before applying the fillers in the locations shown below.

Remove the carrier strip from the back side of the rib filler to expose the tape and carefully apply and align the filler using the adjacent rib profiles as a guide. Start at the inside edge of the rib closest to the box opening.

Apply in all locations (driver & passenger side) as shown.



Parts Bag #1 - Kit 2A - Side rail area (2 locations/side)

Parts Bag #1 - Kit 2B - Side rail area (2 locns/side)

Parts Bag #1 - Kit 2C - middle of tailgate area (2 locns)



## STEP ONE - Front Bed Rails

**Important Note:** The bed rails are unique to the drivers and passengers side of the truck. Position the *Tailgate End* label on the back side of the bedrail towards the tailgate.



Remove the end caps from the tailgate end of the truck deck rails.

Push the tab on the cap into the rail slot to release the cap and then pull the cap out the end of the rail.

Parts Bag #1 Insert three bedrail mounting studs into both deck rail ends and then re-install the deck rail end caps.

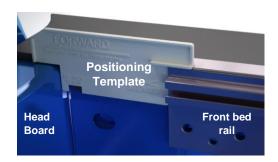
Move two of the studs to the front leaving one at the rear.



Parts Bag #1 With the front bedrails positioned approximately three inches from the head board, align the mounting studs with the rail mounting holes and loosely install the stud nuts.



#### STEP ONE - Front Bed Rails



Parts Bag #2

Locate the bed rails using the positioning template.

Position the template between the truck head board sheet metal (<u>not the bed liner if so equipped</u>) and the front edge of the bed rail. It may be necessary to shift the bed liner slightly to insert the template.

#### **Important Notes:**

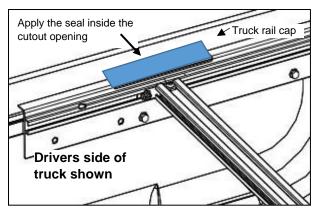
**Protruding sliding glass window** - keep a 1/8in space between the end of the template and the bed rail.



Tighten the stud plate nuts while holding the bed rails in position.

Ensure that the bed rail remains flush with the top of the truck box and firmly against the deck rail face

After tightening the fasteners, reconfirm the position of the bed rails using the template



After installing the bed rails install the bed rail seals.

Clean the truck box rail cover with an alcohol wipe.

Parts Bag #2 Pull the backing from the seal and place the seal inside the bedrail cutout and along the edge of the exposed truck rail cap.

Press down firmly on the seal to ensure that it sticks to the truck box rail cover. If the seal rides over the inside edge of a rail cap rib, ensure the seal follows the contour of the rib.



## STEP TWO - Head Board Seal



Parts Bag #3
Taped inside
the tool box



Clean the top of the head board with rubbing alcohol.

Position the seal along the rear edge of the head board (the side closest to the tailgate).

Install the seal so that both ends sit firmly against the truck box side walls. Starting at one end, roll it out to the other end, making sure that the seal is firmly seated along the Scissors way. Cut off the excess material.

Remove the liner from the top surface of the seal.

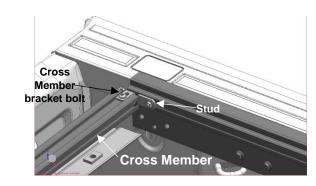
**Note:** The seal is applied to the top surface of the bed liner if it wraps over the top of the head board.

#### **Important Note:**

If you have an aftermarket bed liner on your truck which sits above the height of the truck side rail, the top of the bed liner which wraps over the top of the head board sheet metal will have to be to be trimmed off below the top of the head board.



## STEP THREE - Toolbox Cross Member



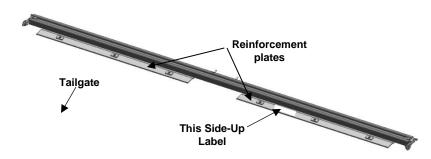
Parts Bag #4

Slide a single stud plate into the front end of the bedrail channel on both sides

Install the cross member from the front end of the bed rail at the head board.

Position the cross member so that the reinforcement plates are pointed towards the tailgate and the "This Side-up" label is visible.

Place the cross member end brackets over the stud and insert the bracket tabs into the bed rail channel. The cross member may have to be installed at an angle to engage the studs.



Cross Member

Passenger Side

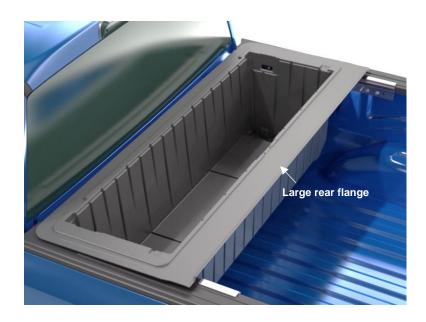
Parts Bag #4

Loose assemble a nut to each stud.

Slide the cross member rearward until positioned in the cut out in the bed rail flange.

**Note**: Ensure that the end bracket tabs are still engaged in the bed rail channel on both sides.



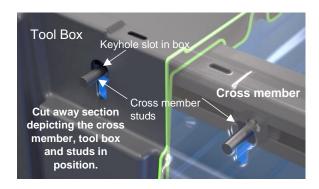


Load the tool box into the opening between the head board and the cross member. The large flange is positioned towards the rear of the truck.

#### **Important Note:**

For a 5.5 box equipped with an aftermarket bed liner - check the clearance between the toolbox legs and the bed liner to ensure that there is a gap. If they are touching, a small window must be cut in the bed liner.



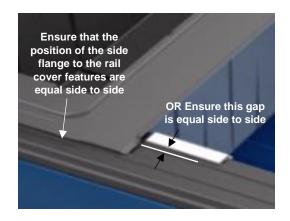


Lift the rear of the compartment upward to allow the cross member to be slid into the channel on the underside of the rear flange.

Slide the studs in the front of the cross member through the keyhole slots in the tool box wall as the cross member and compartment are brought together. Tip the studs upward to ease assembly.

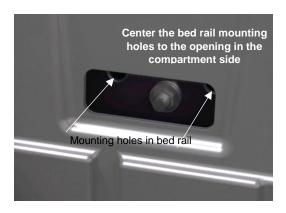
**Note**: Ensure that the cross member bracket tabs are still engaged with the bed rail after the cross member is in place.



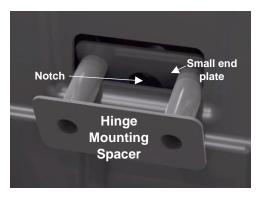


To locate the tool box in the correct position relative to the truck.

 Locate the box side to side by equalizing the location of the side flange and /or the end of the rear flange wall to the edge of the bed rail as shown



- 2) Align the hinge mounting holes on both sides of the tool box with the hinge spacer mounting nuts in the bed rails.
- 3) Re-confirm that the box is still in position side to side.



Parts Bag #4

Install the hinge mounting spacers through the compartment wall opening. Accomplish this by tipping and inserting the lower edge of the small end plate into the opening and then rotating the plate through the opening. The notch in the smaller end plate must face downward.





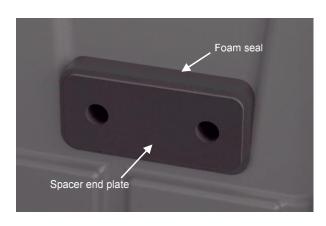
Parts Baq #4

Hand start and then remove all four hinge bolts to ensure proper alignment between the spacer and the bed rail.



Place the front cover mounting Parts Bag blocks in the pockets on either side of the compartment front flange.

> While the cover is still in the box. install the hinge struts. The strut is pre-installed to the upper bracket, fully open the hinge and snap the connector on the open end of the strut to the hinge ball stud.



Carefully place the cover onto the mounting blocks while moving the hinge body brackets into position in front of the spacer plates. You will need to compress the spacer foam seals to allow body brackets to sit against the face of the spacer end plate.

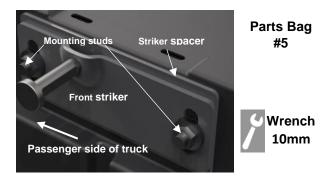
Loose install the hinge mounting bolts on both sides of the cover and then while firmly holding the front cover down and against the mounting blocks, tighten the hinge mounting bolts on both sides. Wrench

Remove the mounting blocks.

12

13mm

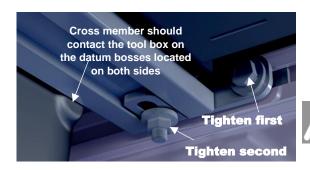




To install the striker spacer plate lift the cross member upward from underneath the tool box flange which will lift the two mounting studs. Insert the striker spacer through the round holes in the keyhole slot Load the front striker to the spacer and hand start the stud nuts.

Confirm that the compartment is still positioned correctly side to side, position the upper edge of the striker plate at the top of the spacer plate and secure the mounting nuts.

**Note:** For ease of assembly start by installing the passenger side nut onto the longer mounting stud, draw the assembly together and then install the driver's side nut.



Tightening the striker nuts will firmly seat the cross member against the rear of the tool box.

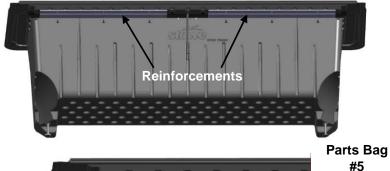
Ensure that the cross member is evenly contacting the two rear datum bosses

Wrench and then tighten the cross member end 10mm bracket nuts.

First tighten the bed rail attachment point then tighten the nut securing the bracket to the cross member.

**Note:** Ensure this tightening sequence is followed.

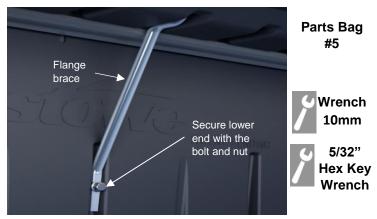




Install the six (6) attachments screws to secure the rear flange reinforcements to the underside of the tool box flange. The screws will thread into the mounting clips installed in the flange.

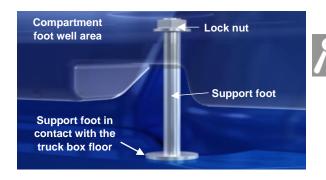


Screw Driver Phillips



Install the tool box rear flange brace by inserting the top end of the brace into the underside of the flange and placing the lower end of the brace against the front face of the box.

Install and tighten the bolt and nut to secure the brace in position. Insert the bolt from the side shown.

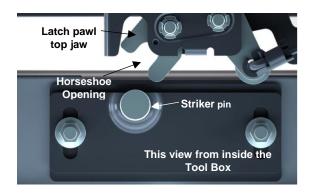


Loosen the lock nut and turn the support foot downward until it rests on the floor of the truck box. Retighten the lock nut to secure the support foot in place. The nut is located on the underside of the box for some applications

Do not over drive the support foot against the truck box floor. The foot should only rest firmly.

**Note:** For 55 box applications, the foot will come to rest on the wheel house.





Closing the cover for the first time, check the relationship between latch pawl and the striker as the cover approaches the closed position. The top jaw of the horse shoe shaped opening in the latch pawl should be centered over the striker pin as it approaches the pin.

If the correct relationship exists between the latch and striker attempt to latch the cover. A misalignment will create a no latch or hard latching condition

If the latch is not aligned side to side the latch bracket will have to be moved on the cover by loosening the two bracket nuts.





Re-position the striker vertically as required to adjust the trim height of the cover along the side of the truck while maintaining the latching function to the striker. The trim height should be about even from front to rear looking at the cover on the driver's side.

The latch will not be able to reach the striker if the striker is too low

#### **Important Note:**

The front cover is equipped with a custom double bulb perimeter seal. Cover closing efforts will improve as the seal settles.

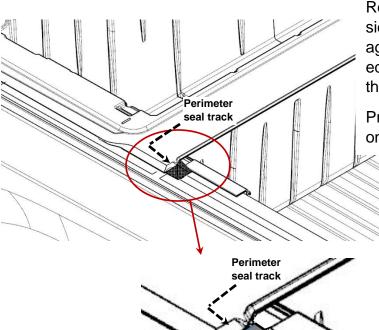


Install the perimeter seal track extenders at the base of the rear flange as shown (Drivers side & passenger side).

Parts Bag #6 Clean the surface of the truck bed rail with alcohol.

Remove the carrier strip from the back side of the foam seal. Now place firmly up against both the rear flange face and the edge of the bedrail and drop it down onto the truck bedrail cover.

Press the seal firmly down on the bedrail once in place.



seal

Stowe Cargo Systems 16

Firm seal

edge contact



## STEP FIVE - Tonneau Cover



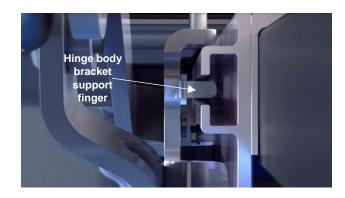
Install the rear struts by snapping the strut sockets over the ball studs on the hinge and cover.

The exposed shaft end is installed towards the hinge.



With the assistance of an associate lift the cover into position just behind the bed rails. Move the cover forward until the hinge body bracket starts to overlap the end of the bed rails.

Watch that the body bracket does not get trapped behind the bed rail.

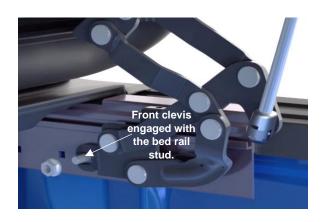


Move the panel forward and insert the body bracket support finger into the channel on each bed rail.

**Note:** The driver and passenger side hinge support fingers must be inserted at the same time into the channel to prevent the finger from binding in the channel.



#### STEP FIVE - Tonneau Cover

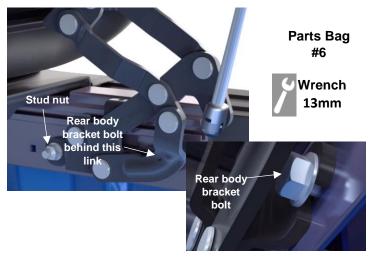


Continue moving the panel forward until the body bracket front clevis engages with and settles over the bed rail stud.

You can allow the rear of the panel to slowly rotate downward and rest on the body bracket fingers while preparing to install the hinge body bracket nuts / bolts.

#### **Important Note:**

**Before installing the hinge mounting nuts / bolts** – have a friend stand on the tailgate and lift the cover up as high as it will go. <u>Have your friend continue to hold the cover in this position until the hinge installation is complete</u>. This will correctly position the cover and guard against the cover moving during assembly.



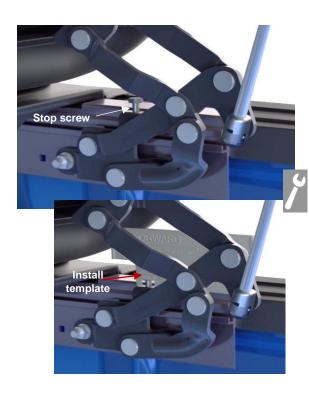
Install and hand tighten only, the stud nut on both sides of the truck.

Then install and hand tighten the rear body bracket bolts. To do this, slide the bolt upwards through the slot in the body bracket until aligned with the bed rail nut and hand tighten.

**Important Note:** Ensure that your friend is still holding the cover up as far as it will go and then tighten the stud nuts and body bracket bolts.



# STEP FIVE - Tonneau Cover



Parts Bag #6

5/32" Hex

Install the rear hinge stop screw and set the installed height using the cutout in the bed rail installation template as an initial guide.

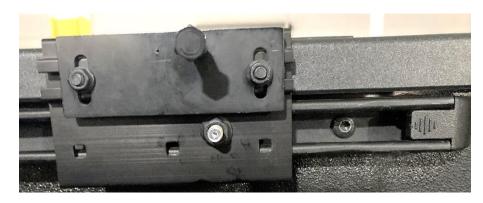
Key Wrench The threads are coated with a locking material to hold the screw in place.

**Important Note:** Adjust the stop screw height to maintain a small gap between the front corners and the tool box flange when the cover is closed.



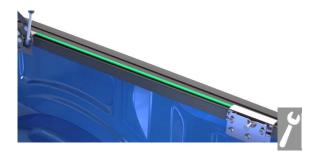
# STEP SIX - Rear Bed Rail & Latch

**Important Note:** The bed rails are unique to the driver and passenger sides of the truck. The bags are labeled, but when correctly placed the striker pin is offset towards the tailgate.



With the rear bedrails positioned approximately twelve inches from the tailgate, align the mounting stud with the rail mounting hole and loosely install the stud nuts.

Parts Bag #6



Tape Measure

Measure from the rear edge of the front bed rail to locate the rear bed rail position. Refer to the chart for the distance.

Secure the bed rail stud nut while holding the bed rail in position.

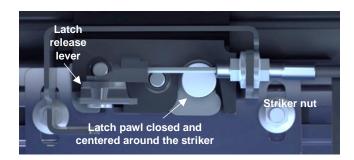


#### Distance from front bed rail to rear bed rail

Application	Inches	Application	Inches
07-13 GM 5.5	22 1/8	21-22 FORD 5.5	21
07-13 GM 6.5	31 3/4	21-22 FORD 6.5	32 7/8
14-18 GM 5.5	22 1/8	09-18 RAM 5.5	19 7/8
14-18 GM 6.5	31 3/4	09-18 RAM 6.5	28 7/8
19-22 GM 5.5	23 1/8	19-22 RAM 5.5	20 1/8
19-22 GM 6.5	32 3/4	19-22 RAM 6.5	28 7/8
20-22 GM HD 6.8	35 1/2	14-21 TUNDRA 5.5	18 7/8
09-14 FORD 5.5	19 7/8	14-21 TUNDRA 6.5	32
09-14 FORD 6.5	31 1/2	22-24 TUNDRA 5.5	20
15-20 FORD 5.5	19	22-24 TUNDRA 6.5	33
15-20 FORD 6.5	30 7/8		



## STEP SIX - Rear Bed Rail & Latch





Loosen the two striker nuts holding the striker in the shipping position on the rear bed rails.

Open the rear cover latches by pivoting the release levers.

Carefully lower the rear cover into the closed position. From inside the truck box close the latch pawls around the striker pins on each side.

With an associate holding the cover down just below the desired trim height, center the striker within the latch pawl opening and secure the striker bolts.

Misalignment will cause a hard to latch condition.

Repeat the operation for the other side and then open and carefully close the rear cover to ensure that the latches are operating smoothly.

# **Your Installation is Complete**



# **Appendix**

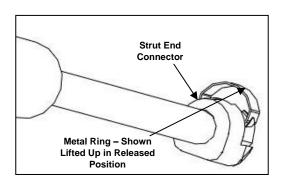
# Replacing a Strut

Using a small flat blade screw driver lift the metal ring on the back side of the socket and rotate it slightly toward the end of the strut. This will release the strut from the ball. Then pull the strut away from the ball stud.

To re-install the strut, snap the socket back over the ball stud. If the retainer clip was dislodged during disassembly you will need to reposition the clip prior to re-installation. Listen for the snap of the retainer as it grasps the ball stud.

**Note:** the open shaft end of the strut is positioned towards the hinge.





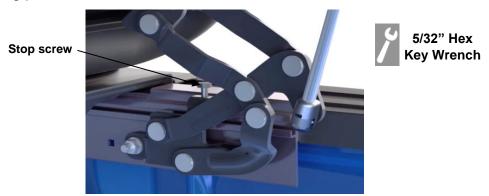


# **Appendix**

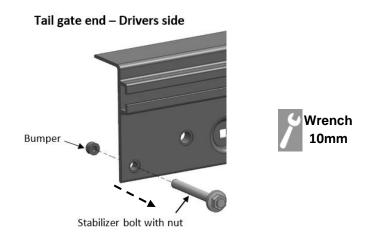
# **Removing the Tonneau Cover**

The procedure is straight forward but you will need the assistance of a friend. You can remove the cover in about 15 minutes

1. Loosen the hinge stop screws (1/side) until the base of the screw is flush with the mounting platform bracket.



2. Remove the bedrail stabilizer bolts (1/side) – these parts are located at the end of the bed rails – reserve the parts for re-installation. <u>Not included with Tundra</u>.





# **Removing the Tonneau Cover**

- 3. Have your friend stand on the tailgate and hold up the cover while you remove the hinge fasteners.
  - a. Loosen the hinge mounting bracket nuts (1/side) leave the nut on the end of the stud
  - b. Remove the hinge mounting bracket bolts (1/side) reserve the bolts for re-installation.



4. Have your friend carefully lower the cover until the hinge bracket alignment tabs rest on the bedrail channel. This will support the cover while you and your associate move to the sides of the truck.



5. From the side of the truck lift the rear of the cover slightly and slide the cover off the bed rails with the help of your friend.

Follow this process in reverse to re-install the cover.